ABSTRACT OF THE DISCLOSURE

A retractable safety syringe consists of a syringe barrel, a needle mount, a plunger rod and a needle. The needle mount is integrated with an outer hub and an inner hub having a plurality equal-spaced spring clamps formed at a lower end thereof. The plunger rod has a plunger formed with a plunger crown with a cone-shaped tip end portion formed on a top thereof and a neck portion formed between the tip end portion and the plunger crown. When the plunger rod is fully extended into the syringe barrel, the tip end portion is inserted into the lower end of the needle mount and the neck portion is clamped by the spring clamps. The needle is able to be retracted into the syringe barrel after finishing an injection procedure.